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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,606	09/10/2003	Ned H. Neal	BFC-106-C1	5301

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PORTMOUTH, NH 03801

EXAMINER
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GUIDOTTI, LAURA COLE

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/659,606

Applicant(s)

NEAL, NED H.

Examiner

Laura C. Guidotti

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 09102003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "20" and "25" (Figure 1); "47" (Figure 2); "85" (Figure 4). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: holding surface "55" (Page 9 Line 1). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of

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an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "collector" (Claims 4 and 12) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

4. The disclosure is objected to because of the following informalities:

Page 8 Line 15 recites "Figure 3 and 4 display an optional core 30..." however, Figures 3 and 4 do not display the core.

Throughout the application (one occurrence can be found on Page 9 Line 5) the term "scrapper" is used in describing what seems to be a *scraper*. The spelling of scraper needs to be corrected.

Appropriate correction is required.

***Claim Objections***

5. Claims 3-4, 6, 9, 11-12, and 16 are objected to because of the following informalities:

Claims 3, 4, 11, and 12 use the term "scrapper" is used in describing what seems to be a *scraper*. The spelling of scraper needs to be corrected.

Claim 4 recites the limitation "said scrapper" in Line 2. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. Claims 1, 5, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Earle, USPN 5,806,135.

Earle discloses the claimed invention including a core (10) that has an exterior (see Figures) and a plurality of substantially identically dimensioned cleaning surfaces that are substantially flat disposed on the exterior of the core (12, 14; Column 2 Lines 12-15). The core is a plastic foam (Column 2 Lines 18-23). The core is a cube capable of having six cleaning surfaces (Column 2 Lines 12-15).

7. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Broun, USPN 415,377.

Broun discloses the claimed invention including a core having an exterior (A; see Figures) and a plurality of substantially identically dimensioned cleaning surfaces that are substantially flat disposed on the exterior of the core (each of the parallel sides are substantially identically dimensioned; see Figures). The eraser also includes a holding apparatus (C).

8. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Wells, USPN 1,844,729.

Wells discloses the claimed invention including a core having an exterior (A; see Figures) and a plurality of substantially identically dimensioned cleaning surfaces that are substantially flat disposed on the exterior of the core (each of the parallel sides are substantially identically dimensioned; see Figures). The eraser further includes a "scraper" (6).

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9. Claims 1, 2, 5, 8, 10, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Grossmeyer, USPN 2,940,100.

Grossmeyer discloses the claimed invention including a core having an exterior (5; see Figures) and a plurality of substantially identically dimensioned cleaning surfaces that are substantially flat disposed on the exterior of the core (each of the parallel sides are substantially identically dimensioned; see Figures). There is a holder or holding apparatus (3) having a receiving portion (4) dimensioned to allow selective removal and reinsertion of the core (Column 2 Lines 20-27), wherein the holder exposes at least one cleaning surface of the core (as shown in Figure 5). The core consists of plastic (6; Column 2 Lines 55-57).

10. Claims 1-5, 8, and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Osborne, USPN 4,207,646.

Osborne discloses the claimed invention including a core having an exterior (4; see Figures, "may" be used with sleeve "30") and a plurality of substantially identically dimensioned cleaning surfaces that are substantially flat disposed on the exterior of the core (there are a plurality of cleaning surfaces labeled "6" and "8"). There is a holder (40) having a receiving portion dimensioned to allow selective removal and reinsertion of the core, wherein the holder exposes at least one cleaning surface of the core (see Figure 4; Column 3 Lines 6-17). There is a "scraper" (48) and a collector positioned to accept dust removed by the "scraper" (42, 43; Column 3 Lines 6-22). The core is a resilient sponge which is considered to be a "foam" (Column 2 Line 34).

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11. Claims 1-5, 8, and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Spence, USPN 511,812.

Spence discloses the claimed invention including a core having an exterior (D; see Figures, "may" be used with sleeve "30") and a plurality of substantially identically dimensioned cleaning surfaces that are substantially flat disposed on the exterior of the core (two identical *substantially* flat front and back cleaning surfaces, Page 1 Lines 57-61). There is a holder (A) having a receiving portion dimensioned to allow selective removal and reinsertion of the core, wherein the holder exposes at least one cleaning surface of the core (see Figures 1-2; Page 1 Lines 62-77). There is a "scraper" (G) and a collector positioned to accept dust removed by the "scraper" (E). The core comprises felt (Page 1 Lines 57-58). Although the holder may be the "holding apparatus", the grip "a" may also be considered a holding apparatus.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.



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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osborne, USPN 4,207,646 as applied to claim 4 in view of Fraser, USPN 3,748,684.

Osborne discloses all elements above, however does not include an open celled foam.

Fraser discloses a blackboard eraser that comprises an open celled foam (the term interconnected cells and open cells are used in the art interchangeably and describe the same cell structure in a foam) that is beneficial for removing chalk marks as it is capable of absorbing and retaining chalk dust for a considerable amount of time (Column 2 Lines 7-20).

It would have been obvious for one of ordinary skill in the art to substitute the sponge like foam of Osborne, for an open celled foam, as Fraser teaches, so that the chalkboard eraser would have the ability of retaining chalk dust for a long time, thereby increasing the eraser's usable lifespan.

13. Claims 9, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osborne, USPN 4,207,646 and Fraser, USPN 3,748,684 as applied to claims 6 and 10, in view of Frazier, USPN 6,367,115.

Osborne and Fraser disclose all elements above (including a holding apparatus, "40"), however do not disclose that there is a whiteboard conditioning fluid impregnated into the open celled foam.

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Frazier discloses an eraser that is impregnated with an organosilicone fluid, such as Polyalkyleneoxide modified polydimethylsiloxane to increase dust holding abilities and anti-static properties (Column 4 Lines 40-47).

It would have been obvious for one of ordinary skill in the art to modify the open celled foam of Osborne and Fraser, to be impregnated with a whiteboard conditioning fluid, as Frazier teaches, so that the eraser has increased dust holding abilities and anti-static properties.

14. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grossmeyer, USPN 2,940,100 as applied to claim 10, in view of Earle, USPN 5,806,135.

Grossmeyer and Earle disclose all elements above. Grossmeyer does not disclose that the core and cleaning surfaces comprise a one piece foam cube.

It would have been obvious for one of ordinary skill in the art to modify the cleaning device of Earle to be comprised of a foam cube, as Grossmeyer teaches, so that the cleaning device is capable of retaining dust better and a cube provides additional cleaning surfaces that would be capable of performing cleaning.

15. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grossmeyer, USPN 2,940,100 and Earle, USPN 5,806,135 as applied to claim 14, in view of Fraser, USPN 3,748,684.

Grossmeyer and Earle disclose all elements above, however do not particularly disclose that the foam is an open-celled structure.

Fraser discloses a blackboard eraser that comprises an open celled foam (the term interconnected cells and open cells are used in the art interchangeably and describe the same cell structure in a foam) that is beneficial for removing chalk marks as it is capable of absorbing and retaining chalk dust for a considerable amount of time (Column 2 Lines 7-20).

It would have been obvious for one of ordinary skill in the art to substitute the sponge like foam of Grossmeyer and Earle, for an open celled foam, as Fraser teaches, so that the chalkboard eraser would have the ability of retaining chalk dust for a long time, thereby increasing the eraser's usable lifespan.

16. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grossmeyer, USPN 2,940,100, Earle, USPN 5,806,135, and Fraser, USPN 3,748,684.

Grossmeyer, Earle, and Fraser disclose all elements above, however do not disclose that the holding apparatus is felt.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the holding apparatus comprise felt, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious engineering choice. In re Leshin, 125 USPQ 416.

17. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grossmeyer, USPN 2,940,100 as applied to claim 10, in view of Frazier, USPN 6,367,115.

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Grossmeyer disclose all elements above, however does not disclose that there is a whiteboard conditioning fluid impregnated into the open celled foam.

Frazier discloses an eraser that is impregnated with an organosilicone fluid, such as Polyalkyleneoxide modified polydimethylsiloxane to increase dust holding abilities and anti-static properties (Column 4 Lines 40-47).

It would have been obvious for one of ordinary skill in the art to modify the open celled foam of Grossmeyer, to be impregnated with a whiteboard conditioning fluid, as Frazier teaches, so that the eraser has increased dust holding abilities and anti-static properties.

18. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spence, USPN 511,812 as applied to 10, in view of Frazier, USPN 6,367,115.

Spence disclose all elements above, however does not disclose that there is a whiteboard conditioning fluid impregnated into the open celled foam.

Frazier discloses an eraser that is impregnated with an organosilicone fluid, such as Polyalkyleneoxide modified polydimethylsiloxane to increase dust holding abilities and anti-static properties (Column 4 Lines 40-47).

It would have been obvious for one of ordinary skill in the art to modify the open celled foam of Spence, to be impregnated with a whiteboard conditioning fluid, as Frazier teaches, so that the eraser has increased dust holding abilities and anti-static properties.


***Conclusion***

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Guidotti whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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